CA/1632/R

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1999-12-01

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMITTEE OF ACTION

SUBJECT **Agenda item 4.1a), Sydney**

Report to the Committee of Action following the meeting of TC 80: Maritime navigation and radiocommunication equipment and systems, held in Southampton (UK) from the 27 to 29 September, 1999.

BACKGROUND

1. Projects older than 7 years

One project of the TC 80 programme of work is older than 7 years: ISO/IEC 11674 Ed. 1.0 which is at the ADIS stage. This matter should be dealt with item 3.4 below.

2. Requests for extensions of target dates

TC 80 requested an extension of the target date for two projects, for which the TC 80 officers offered the following comments:

a. IEC 60936-3: new target date for CDV circulation: 2000-03: “The reason for delay involves the IMO decision in 1998 to extend the requirements for ECDIS (Electronic chart display and information system - IEC 61174).”

b. IEC 61924: new target date for CD circulation: 2000-08: “The task turned out to be much more complicated than originally expected. There have been difficulties in ensuring compatibility with the published IEC 61209, the IEC 60872 series and the IEC 60936 series, the IEC 61174 and the development of the IEC 61993-2. It has been decided therefore to circulate a CD for comments before completing the full standard.”

3. Other important matters

The attention of the Committee of Action is drawn to the following:

3.1 There are many technical developments in the field of TC 80; this is reflected in a continuously increasing standards production rate of the committee over the last few years. The production rate of TC 80 standards is shown in the following table.

Year	Standards issued	Year	Standards issued
1990	1	1995	2
1991	2	1996	4
1992	4	1997	2
1993	0	1998	6
1994	4	1999	6

3.2 The projects of TC 80 are directly associated with the activities of the IMO Maritime Safety Committee and normally complement performance standards adopted by IMO in their resolutions. The work of TC 80 is also based on ITU recommendations. Vice versa TC 80 is able, by its representatives, to influence the resolutions and recommendations of these organizations.

Sometimes IMO does not meet its original schedule when developing its resolutions (due to new developments, etc.); this, unavoidably, creates delays in the associated TC 80 projects with respect to the initial target dates.

3.3 A category D liaison with ETSI had been established about two years ago in the frame of the development of the IEC 61097 series (GMDSS – Global Maritime Distress and Safety System) by TC 80. It was pointed out at the TC 80 meeting in Southampton that the liaison with ETSI had occasionally been difficult, due to the lack of cooperation of the relevant ETSI experts. Nevertheless, the TC 80 officers wish to maintain the category D liaison, since the IEC 61097 series is going to be revised and/or completed shortly and they expect an improved cooperation at the experts' level.

3.4 TC 80 has some joint projects with ISO TC 8 SC 6 (namely 11674, 16273, 16328, 16329) under the responsibility of ISO. The TC 80 officers reported that the cooperation between the two committees is not satisfactory, because the ISO TC 8 SC 6 secretariat does not adequately take into account the TC 80 viewpoint.

3.5 The 1999 meeting held in Southampton was the last TC 80 meeting held with Mr. P. Griffiths as secretary of the committee. Mr. Griffiths was thanked for his contributions and his commitment to the work of the committee. The UK national committee will shortly nominate his successor.

ACTION

The Committee of Action is invited to submit comments on this report for discussion during its next meeting (2000-02-10/11), in order to approve the:

- continuation of the joint work with ISO;
- requested extension of target dates;
- report of TC 80 including the programme of work;
- revised strategic policy statement;
- maintenance plans.

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REPORT TO THE COMMITTEE OF ACTION

IEC/TC or SC	Secretariat	Date
80	UK	1999-11

Please ensure this form is sent to the Central Office as soon as possible following the meeting, either by handing it to the Central Office representative or by sending it by telefax or airmail.

Title of TC
Maritime navigation and radiocommunication equipment and systems

Title of SCs

Meeting dates	Place and country
27 – 29 September, 1999	Southampton, UK.
Number of delegates	Number of countries
46	10

Chairman of the meeting (name and country)
Dr A P Norris – United Kingdom

A. Questions of principle on which a decision is required
None.

B. New work items, and drafts approved for voting as FDIS: see programme of work attached (annex A), as updated during the meeting.

C. Brief statement of the results achieved during the meeting (other than those included in A and B), such as setting-up or disbanding of WGs, changes to the tasks of WGs.

1 Item 7 of the Agenda dealt with new work items. It was agreed to place the following at Stage 0 in the work programme:
.1 Merger of radar/plotting standards (IEC 60872 series and IEC 60936 series);
.2 Radar/Universal automatic identification system (UAIS) compatibility;
.3 Symbology for radar/Plotting/ECDIS/UAIS;
.4 New technology radar;
.5 Bridge watch alarms;
.6 Track control – High speed craft;
.7 Vessel Traffic systems (VTS);
.8 Radar target enhancer (RTE).

2 The tasks of Working Group 1 and Working Group 8 were amended to include a pro-active involvement in the work of the ITU-R on unwanted emissions from radiodetermination and radio systems respectively.

3 The task of Working Group 11 – Voyage data recorders (VDR) – was virtually complete. It would be disbanded at the completion of the FDIS vote (future IEC 61996) which was expected early in year 2000.

4 A maintenance programme was agreed for all the TC 80 published standards, and is included in the modified Strategic Policy statement.

5 The WG 6 and MT1 were now conducting their work by use of an FTP server through IEC Central Office. It was expected that during the next year more of the Working Groups would be able to go to full electronic working.

D. Strategic policy statement

☐ not modified ☒ attached ☐ expected by .....

E. Approximate date at which the committee considers its next meeting should be held, subject to the understanding that the secretariat must submit a formal request to the Central Office at least six months before the date proposed for the meeting.

It is important to note that isolated meetings should, as far as possible, not be held too closely to or overlap with a General Meeting expected to take place between mid-September and mid-October each year (see Administrative Circular No. 282/89).

mid - 2001

Name or signature of the secretary

P F C GRIFFITHS

ANNEX A

1999-11-29 11:20 IEC CENTRAL OFFICE - PROGRAMME OF WORK FOR TC/SC 80

Project	Stage	Document Reference	Init	Current Stage	Next Stage	Mod	PPUB Stage	R.Pub Stage	Project Leader
IEC 60872-3 Ed.1.0	CCDV	80/227/CDV	93-12	99-04	99-12	0	01-01	?	R. G. Lee
WG(s): 01 Title: Maritime navigation and radiocommunication equipment and systems - Radar plotting aids - Part 3: Electronic plotting aid (EPA) - Performance requirements - Methods of testing and required test results									
*IEC 60936-3 Ed.1.0	ACDV	80(Sec.)82/NP	93-12	98-03	00-03	1	01-11	00-12	R.G. Lee
WG(s): 01 Title: Maritime navigation and radiocommunication equipment and systems - Radar - Part 3: Shipborne radar with chart facilities - Methods of testing and required test results									
IEC 60936-4 Ed.1.0	ACDV	80(Sec.)82/NP	93-12	98-03	99-09	0	01-03	01-03	R.G. Lee
WG(s): 01 Title: Maritime navigation and radiocommunication equipment and systems - Radar - Part 4: Shipborne radar - ECDIS back-up - Methods of testing and required test results									
IEC 60945 Ed.4.0	ACDV	80/155/NP	97-11	99-09	00-04	0	01-09	01-07	K.P. Fisher
WG(s): 05 Title: Maritime navigation and radiocommunication equipment and systems - General requirements - Methods of testing and required test results									
IEC 61108-1 Ed.2.0	ACDV	80/218/NP	99-04	99-09	01-01	0	01-09	01-04	R. G. Lee
WG(s): 4A Title: Maritime navigation and radiocommunication equipment and systems - Global navigation satellite systems (GNSS) - Part 1: Global positioning system (GPS) - Receiver equipment - Performance requirements, methods of testing and required test results									
IEC 61162-1 Ed.2.0	DEC	80/203/CDV	98-11	99-09	99-11	0	00-05	03-11	M. P. Fox
WG(s): 06 Title: Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners									
IEC 61162-4 f1 Ed.1.0	ACDV	80/175/CD	93-12	99-09	99-12	1	01-08	?	M.P.Fox
WG(s): 06 Title: Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 4: Multiple talker and multiple listeners - Ship control network - Fragment 1: Introduction and general principles									
IEC 61162-4 f2 Ed.1.0	ACDV	80/176/CD	93-12	99-09	99-12	0	01-08	?	M.P.Fox

WG(s): 06
Title: Maritime navigation and radiocommunication equipment and systems - Digital interfaces - Part 4: Multiple talker and multiple listeners - Ship control network - Fragment 2: Protocol definition

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IEC 61174 Ed.2.0 | ACDV | | 99-09 | 00-07 | 0 | 01-09 | 01-09 | Lt Dan Mades
WG(s):
Title: Maritime navigation and radiocommunication equipment and systems - Electronic chart display and information system (ECDIS) - Operational and performance requirements, methods of testing and required test results

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*IEC 61924 Ed.1.0 | ANW | 80/119/NP | 96-03 | 96-03 | 00-08 | 3 | 98-06 | 98-06 | Podesta
WG(s): 10
Title: Integrated navigation systems(INS)

IEC 61996 Ed.1.0 | CCDV | 80/223/CDV | 97-02 | 99-03 | 99-11 | 0 | 00-08 | 00-02 | C J Winkley
WG(s): 11
Title: Maririme navigation and radiocommunication equipment and systems - Shipborne voyage data recorder (VDR) - Performance requirements - Methods of testing and required test results

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IEC 62065 Ed.1.0 | ACDV | 80/161/NP | 97-12 | 99-09 | 00-03 | 0 | 01-09 | 01-05 | R. G. Lee
WG(s): 01
Title: Maritime navigation and radiocommunication equipment and systems - Track control systems - Methods of testing and required test results

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ISO/IEC 11674 Ed.1.0 | ADIS | 80/219/CDV | 83-07 | 99-10 | 99-12 | 0 | 00-08 | ?
WG(s):
Title: Ships and marine technology - Heading control systems

ISO/IEC 16273 Ed.1.0 | ANW | | 99-10 | 99-10 | 00-12 | 0 | 04-10 | ?
WG(s):
Title: Night vision equipment for high speed craft

ISO/IEC 16328 Ed.1.0 | CCDV | 80/228/CDV | | 99-07 | 00-03 | 0 | 01-03 | ?
WG(s):
Title: IEC/ISO 16328 - Maritime navigation and radiocommunication equipment and systems - Gyro-compasses for high-speed craft - Performance requirements - Methods of testing and required test results

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ISO/IEC 16329 Ed.1.0 | ANW | | 99-10 | 99-10 | 00-12 | 0 | 04-10 | ?
WG(s):
Title: Heading control systems for high speed craft

PWI 80-1 Ed.1.0 | PWI | | | 99-09 | | 0 | | ?
WG(s):
Title: Merging of radar/plotting standards

PWI 80-2 Ed.1.0 **PWI** **99-09** **0** **?**
WG(s):
Title: Radar/UAIS compatibility

PWI 80-3 Ed.1.0 **PWI** **99-09** **0** **?**
WG(s):
Title: Symbology - radar/plotting/UAIS/ECDIS

PWI 80-4 Ed.1.0 **PWI** **99-09** **0** **?**
WG(s):
Title: New technology radar

PWI 80-5 Ed.1.0 **PWI** **99-09** **0** **?**
WG(s):
Title: Bridge watch alarms

PWI 80-6 Ed.1.0 **PWI** **99-09** **0** **?**
WG(s):
Title: Track control - HSC - motion control

PWI 80-7 Ed.1.0 **PWI** **99-09** **0** **?**
WG(s):
Title: VTS/UAIS

PWI 80-8 Ed.1.0 **PWI** **99-09** **0** **?**
WG(s):
Title: Radar target enhancer (RTE)

Project	Stage	Document Reference	Title	Init	Current Stage	Next Stage	R.Pub Stage	WG	Project Leader
Full project number	Stage	Document Reference	Title	yy-mm	yy-mm	yy-mm/n	yy-mm	WG	Project Leader

TC/SC	Technical or subcommittee concerned	document reference	Current document reference
project	Project Number corresponding to publication number	status	Current project status (see below)
init	Project initiation date (YY-MM)	Current stage	Date when current status was reached (YY-MM)
Mod	Number of extensions of target dates	title	Title of the project (English)
Next Stage	Target date for next stage (YY-MM) / number of updates	Project Leader	Name of project leader
R. Pub Stage	Requested target date for published standard (YY-MM)	Date Time	Date and time of printout

Stage codes decoded in alphabetical order

1CD	1st Committee Draft
2CD	2nd Committee Draft
3CD	3rd Committee Draft
4CD	4th Committee Draft
5CD	5th Committee Draft
6CD	6th Committee Draft
7CD	7th Committee Draft
8CD	8th Committee Draft
9CD	9th Committee Draft
A2CD	Approved for 2nd Committee Draft
A3CD	Approved for 3rd Committee Draft
A4CD	Approved for 4th Committee Draft
A5CD	Approved for 5th Committee Draft
A6CD	Approved for 6th Committee Draft
A7CD	Approved for 7th Committee Draft
A8CD	Approved for 8th Committee Draft
A9CD	Approved for 9th Committee Draft
ACDV	Draft approved for Committee Draft with Vote
ADIS	Approved for DIS circulation
AMW	Approved Maintenance Work
ANW	Approved New Work
APUB	Draft approved for publication
BPUB	Publication being printed
BWG	Draft returned to Working Group
CAN	Draft cancelled
CCDV	Draft circulated as Committee Draft with Vote
CDIS	Draft circulated as DIS
CDM	Committee Draft to be discussed at meeting
CDVM	CDV to be discussed at meeting
DEC	Draft at editing check
DREJ	Draft rejected
NADIS	Draft not approved under Committee Draft with vote
NCD	Draft returned to TC/SC after FDIS
PNW	Proposed New Work
PPUB	Publication issued
PWI	Potential new work item
RDIS	Text for DIS received and Registered
SRP	Publication under Systematic Review
SUBDEC	Approved draft preparation subcontracted by C.O.
WPUB	Publication withdrawn

Stage codes decoded in logical order

PWI	Potential new work item
PNW	Proposed New Work
ANW	Approved New Work
AMW	Approved Maintenance Work
1CD	1st Committee Draft
A2CD	Approved for 2nd Committee Draft
2CD	2nd Committee Draft
A3CD	Approved for 3rd Committee Draft
3CD	3rd Committee Draft
A4CD	Approved for 4th Committee Draft
4CD	4th Committee Draft
A5CD	Approved for 5th Committee Draft
5CD	5th Committee Draft
A6CD	Approved for 6th Committee Draft
6CD	6th Committee Draft
A7CD	Approved for 7th Committee Draft
7CD	7th Committee Draft
A8CD	Approved for 8th Committee Draft
8CD	8th Committee Draft
A9CD	Approved for 9th Committee Draft
9CD	9th Committee Draft
CDM	Committee Draft to be discussed at meeting
ACDV	Draft approved for Committee Draft with Vote
CCDV	Draft circulated as Committee Draft with Vote
ADIS	Approved for DIS circulation
CDVM	CDV to be discussed at meeting
NADIS	Draft not approved under Committee Draft with vote
BWG	Draft returned to Working Group
DREJ	Draft rejected
DEC	Draft at editing check
SUBDEC	Approved draft preparation subcontracted by C.O.
RDIS	Text for DIS received and registered
CDIS	Draft circulated as DIS
APUB	Draft approved for publication
NCD	Draft returned to TC/SC after FDIS
CAN	Draft cancelled
BPUB	Publication being printed
PPUB	Publication issued
SRP	Publication under Systematic Review
WPUB	Publication withdrawn

CA/1632/R

STRATEGIC POLICY STATEMENT

IEC/TC or SC	Secretariat	Date
80	UK	1999-11

Please ensure this form is annexed to the Report to the Committee of Action if it has been prepared during a meeting, or sent to the Central Office promptly after its contents have been agreed by the committee.

Title of TC

Maritime navigation and radiocommunication equipment and systems

A. Background

Scope – To prepare standards for maritime navigation and radiocommunication equipment and systems, making use of electrotechnical, electronic, electroacoustic, electro-optical and data processing techniques;

Current and future Working Groups-

1 Radar/ARPA;
1A Track control;
4 Terrestrial position fixing aids;
4A Global navigation satellite systems;
5 General requirements;
6 Digital interfaces;
8 Global maritime distress and safety system (GMDSS);
8A Automatic shipborne identification systems (AIS);
10 Integrated navigation systems;
11 Voyage data recorders (VDR);

History – TC 80 was originated in 1980 on the basis that there was seen to be a need to develop International technical standards for the equipments and systems that were part of, or were likely to become part of the mandatory carriage requirements of the International Maritime Organisation (IMO) Conventions, in particular, the Safety of Life at Sea (SOLAS) and Marine Pollution (MARPOL). The title of the Committee clearly reflects those IMO requirements. The scope specifically excludes aeronautical and land applications. Work in the International Telecommunication Union with regard to frequency allocations and unwanted emissions may require TC 80 in future to develop technical standards that are outside the mandatory requirements of IMO SOLAS, but are inter related with regard to safety of life at sea and involve small sea going vessels.

Publications – 34

Projects in development – 15

P members – 17 – Belgium, Canada, China, Denmark, Egypt, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Romania, Russia, Sweden, UK, USA.

Liaisons – Internal – TC18 and ACEC
Other – all the major International maritime organisations including – International Maritime Organisation (IMO), International Chamber of Shipping (ICS), the Internationa Hydrographic Organisation (IHO), the International Association of Lighthouse Authorities (IALA), International Telecommunication Union (ITU), International Standards Organisation (ISO TC 8/SC5/6/9/10), International Committee of Maritime Radio (CIRM). In addition there are liaisons with the Radio Technical Commission for Maritime Services (RTCM) and the National Marine Electronics Association (NMEA) of the USA, the International Search and Rescue Satellite System (COSPAS-SARSAT) and the International Mobile Satellite Organisation (INMARSAT). TC 80 has established liaison with the International Association of Classification Societies through individual members.

B. Environment

B.1 Business environment

The priority work programme is directly associated with that of the IMO Maritime Safety Committee. It mirrors the performance standards adopted by IMO in their Resolutions and the relevant ITU Recommendations. The scope does not exclude items that are not mandatory with regard to the IMO SOLAS Convention.

External environment – The technical Committee is able, by being represented in both IMO and ITU, to influence the performance and technical content of the Resolutions and Recommendations. This is invaluable to manufacturing industry, in that the performance and technical standards represent the practical state of the current and emerging technology. The Technical Committee has little or no control over the Regulatory aspects of the mandatory equipments selected or of some of technical aspects that influence manufacturing design e.g. radio frequency allocation. This aspect is covered to some extent by members of the Committee being members of their National Government regulatory bodies. This is an area in which the Committee is attempting to increase its influence and to be more proactive in its deliberations.

Internal environment - The Committee objective is to publish standards that have gained overwhelming International acceptance, and thus provide International industry with a single equipment standard. This objective is achieved, in most cases, by ensuring that the Working Groups have representatives from Government, the user, industry and test certification bodies.

B.2 Market demand

Customers – International Organisations, Governments, users, industry and test certification authorities

TC representation – all of the above

Additional representation – Regional standards bodies as required

Participation – there have been no problems with obtaining participation from relevant bodies, with the exception of the International Association of Classification Societies and the European Telecommunications Standards Institute (ETSI). In both cases this has to a certain extent been overcome by the presence of individual members attending our meetings.

Regional/National use - *our aim is that the standards are used and accepted world-wide. The primary frustration of that goal is in Europe with rival ETSI standards for maritime radiocommunication equipment and systems.*

Competing standards – the only significant competition is from ETSI (see above).

Future growth – there are no signs in IMO that the need for safety maritime standards will decrease. There are continuing pressures world-wide to reduce pollution of the environment and improve safety at sea. This could also lead to the requirement for technical standards for ships that are not covered by the IMO SOLAS Convention e.g. small craft radar, the single largest population of maritime radar, that is now required to meet the Radio Regulation requirements for spurious emissions.

B.3 Trends in technology and trade

The single largest technology trend is the continuing increase in the use of digital techniques and satellite systems for navigation and radiocommunication. This creates a need for the regular updating of the standards. The world-wide increase in the use of digital mobile radiocommunications is leading to greater pressures on the radio-frequency spectrum. In particular the long held radio frequency allocations for maritime radiodetermination and radiocommunication systems are under increasing threat. This will inevitably lead to greater technological challenges for the maritime industry - to create products that operate satisfactorily in an increasingly congested radio environment. Although TC 80 develops standards for safety of life services, it does not automatically protect them from these other influences.

B.4 Ecological environment

Impact on the environment – the equipment standards are for electronic devices, some of which contain transmitters and receivers. In the case of transmitters the output is invariably modulated electromagnetic radiation, the standards of which are strictly controlled by the ITU Radio Regulations. Radiation hazards and voltage levels, with regard to the safety of personnel, are specified in detail, in conformity with recognised International standards.

C. Work programme

Current work

The Committee meets at two year intervals. It is therefore expected that the next meeting will be in the autumn of 2001.

List of work priorities:

1) the continuation of the development of the IEC 60872 and IEC 60936 series;
2) the continuation of the development of the IEC 61108 series;
3) development of the fourth revision of IEC 60945;
4) the continuation of the development of the IEC 61162 series;
5) the maintenance of IEC 61174;
6) the continuation of the development of the IEC 61097 series;
7) the continuation of the development of the IEC 61993 series;
8) the development of IEC 61924;
9) the final development of IEC 61996;
10) the continuing development of IEC/ISO 62065 – track control;
11) the continuing development of ISO/IEC 11674 – heading control;
12) the continuing development of ISO/IEC 16328 – heading control for HSC;
13) the continuing development of ISO/IEC 16329 – gyro-compasses for HSC;
14) the continuing development of ISO/IEC 16273 – night vision.

Plan/Objectives/Location WG meetings –

For items C.1 – 1, 2, 3, 4, 6, 7, 8, 10 and 14, there will be about 3 meetings/year each of about 3 days duration until completion. For item C.1 – 5 – the maintenance team are developing a revision by use of an IEC FTP – to complete to publication in 2 years. For item C.1 – 9 – the development has nearly reached the FDIS stage, with expected publication early in 2000. For C.1 – items 11and12, the development has reached the parallel voting stage – in IEC the CDV stage. For C.1 item 14 – the standard is being developed by joint meetings and is currently still at the drafting stage.

Locations are by agreement with the Convenors.

Additional expertise required – determined on an ad-hoc basis as required.

C.2 Resources/infrastructure needed

Invitations for TC meetings – responsibility of the Secretary

Invitations WG/Maintenance team meetings – responsibility of the Convenors/Project leaders

Liaisons needed – none.

Editing Committee – all the publications are in English only – with the exception of the revision of IEC 60945.

D. Future work

Long term view – For the future the Committee will continue to “mirror” the activities of the IMO with regard to navigation and radiocommunication equipment and systems and their associated interfaces. It will update current publications in conformance with the agreed Maintenance cycles. It will initiate new work items as and when the IMO activity creates the need for an International standard, and when an associated activity creates a need, within the scope of TC 80.

Size of the activity – this is considered to be stable, without significant increase/decrease.

Structure – The present structure has proved to be satisfactory. No significant reasons have emerged for change.

Requirements for new expertise – this is identified as and when required. There have been no problems acquiring the expertise required.

Stage 0 projects – some have emerged from the 1999 Plenary meeting, and are included in the revised work programme of the Committee and the report to the Committee of Action.

E. Maintenance cycle

Publication no.	Date of publication	Publication date for proposed amendment or revision	Responsibility (Maintenance Team)
IEC 60872-1	1998-09	2008]	MT2
IEC 60872-2	1999-01	2008]	MT2
IEC 60872-3	2000-04 (expected)	2008] amalgamated as	MT2
IEC 60936-1	1999-12 (expected)	2008] one standard	MT2
IEC 60936-2	1998-10	2008]	MT2
IEC 60945	2001-01 (expected)	2006 revision	MT3
IEC 61023	1999-07	2002 revision	MT4
IEC 61075	1991-07	2002 revision	MT5
IEC 61097-1	1992-07	2002 revision	MT6
IEC 61097-2	1994-12	2004 revision	MT7
IEC 61097-3	1994-06	2001 revision	MT8
IEC 61097-4	1994-11	2004 revision	MT9
IEC 61097-5	1997-12	2007 revision	MT10
IEC 61097-6	1995-02	2005 revision	MT11
IEC 61097-7	1996-10	2006 revision	MT12
IEC 61097-8	1998-09	2008 revision	MT13
IEC 61097-9	1997-12	2007 revision	MT14
IEC 61097-10	1999-06	2009 revision	MT9
IEC 61097-12	1996-11	2006 revision	MT12
IEC 61108-1	2002-03	2007 revision	MT15
IEC 61108-2	1998-06	2008 revision	MT15
IEC 61110	1992-08	To be deleted	
IEC 61135	1992-05	To be deleted	
IEC 61162-1	2000-02 (expected)	2006 revision	MT16
IEC 61162-2	1998-09	2003 revision	MT16
IEC 61174	1998-08	2001 amendment	MT1
IEC 61209	1999-04	2002 revision	MT17
IEC 61993-1	1999-04	2009 revision	MT18
IEC 61996	2000-04 (expected)	2006 revision	MT19

Name or signature of the secretary

P F C GRIFFITHS